

What is claimed is:

1. A data management system comprising:

means for storing first sets of data each having a first bandwidth communication requirement and second sets of data each representative of an associated one of the first sets of data and having a second bandwidth communication requirement less than the first bandwidth communication requirement;

means for allowing a user to download a particular second set of data from the storing means;

means for accepting a work order from a first location wherein the work order identifies the particular second set of data and includes further data developed outside the system;

means for electronically routing a job order to a second location; and

means for downloading the first set of data associated with the second set of data to the second location.

2. A system as defined in claim 1 wherein the first set of data comprises high resolution digital images, and the second set of data comprises low resolution digital images.

3. A system as defined in claim 2 wherein the high resolution digital images are input to the system by an image provider user.

4. A system as defined in claim 3 further comprising image handling means for processing the high resolution digital images input by the image provider user, the image handling means being adapted to develop low resolution images of the high resolution digital images received from the image provider user and to store both the high resolution digital images and the low resolution images in the storing means in an addressable fashion for future searching.

5. A system as defined in claim 3 wherein the allowing means discriminates between users communicating with the system to control user access to the digital images stored in the storing means, the allowing means limiting access to the digital images provided by the image provider user to at least one user identified by the image provider user.

6. A system as defined in claim 5 wherein the digital images provided by the image provider user are transparent to all users except the at least one user identified by the image provider user.

7. A system as defined in claim 1 further comprising event tracking means for monitoring and recording predefined events occurring in the system.

8. A system as defined in claim 7 wherein the predefined events comprise one of the group consisting of: storing new data in the storing means; deleting data from the storing means; connecting to the system; disconnecting from the system; conducting a search of the data stored in the storing means; downloading data from the first set of data stored in the storing means; downloading data from the second set of data stored in the storing means; and routing the work order to a user.

9. A system as defined in claim 7 further comprising means for developing an indication of a charge to be assessed a user when at least one of the predefined events is recorded by the event tracking means.

10. A system as defined in claim 9 wherein the charge developing means automatically generates invoices on a periodic basis.

11. A system as defined in claim 10 wherein the routing means automatically routes the invoices to at least one user responsible for payment.

12. A system as defined in claim 1 wherein the routing means automatically electronically routes the job order to the second location.

13. A system as defined in claim 12 wherein the routing means automatically sends a facsimile to the second location notifying the second location of the job order being routed.

14. A system as defined in claim 12 wherein the routing means automatically sends an e-mail message to the second location notifying the second location of the job order being routed.

15. A system as defined in claim 1 wherein the job order defines a document to be printed, the second location is a printing facility, and the first set of data downloaded by the downloading means is to be printed as part of the document.

16. A system as defined in claim 15 wherein the allowing means, the accepting means, the routing means and the downloading means are implemented by at least one programmed processing device.

17. A system as defined in claim 16 wherein the at least one programmed processing device is implemented by a file storage server and an autolog server interconnected for co-operative operation.

18. A system as defined in claim 1 further comprising a communication device to permit users to communicate with the system.

19. A system as defined in claim 18 wherein the communication device is implemented by an internet server, a telecommunications server, and an e-mail server.

20. A system as defined in claim 17 wherein the at least one programmed processing device is further implemented by a database server.

21. A system as defined in claim 1 wherein the storing means is implemented by an image storage device and a data storage device.

22. A system as defined in claim 21 wherein the image storage device comprises an optical disk robot and an optical data reader.

23. A system as defined in claim 21 wherein the data storage device comprises a RAID system.

24. A system as defined in claim 1 further comprising means for searching the storing means in response to user inputs to develop the particular second set of data.

25. A system as defined in claim 1 wherein the data developed outside the system and included in the work order comprises a page description language file and the first set of data downloaded by the downloading means comprises a bit mapped image.

26. A system as defined in claim 1 further comprising:

means for receiving digital data from a data provider user to be stored in the storage means; and,

means for compressing the digital data received by the receiving means in accordance with a parameter set by the data provider user.

27. A system as defined in claim 26 wherein the digital data received by from the data provider user is used to develop the first and second data sets.

28. A system as defined in claim 26 wherein the parameter defines a compression format to be employed by the compressing means.

29. A system as defined in claim 26 wherein the parameter defines a degree of compression to be employed by the compressing means.

30. A system as defined in claim 26 further comprising means for developing an indication of a charge

to be assessed the data provider user for storing the digital data in the storage means.

31. A system as defined in claim 30 wherein the charge developing means develops the charge based on the amount of storage memory utilized by the digital data.

32. A digital data storage facility as defined in claim 31 wherein the charge developing means develops a further charge based on the amount of time the digital data is stored in the storage means.

33. A system as defined in claim 1 further comprising means for translating the particular second set of data into a file format defined by the user before the allowing means downloads the particular second set of data.

34. A system as defined in claim 1 further comprising means for translating data received by the system into a file format defined by the user before storing the received data in the storing means.

35. A system as defined in claim 16 wherein the at least one programmed device, the first location, and the second location are interconnected by a network.

36. A data management system comprising:

a storage device for storing first sets of data each having a first bandwidth requirement and second sets of data each representative of an associated one of the first sets of data and having a second bandwidth requirement less than the first bandwidth requirement;

a search engine for searching among sets of data stored in the storage device;

a communication device operable to allow remote communication by a user with the system including means for sending a particular second set of data to a user in response to a user request to the search engine;

means for accepting a user-defined work order from a first location via the communication device wherein the work order identifies a set of data in the storage device and includes further data developed outside the system;

a router for electronically routing a job order to a second location; and

means for downloading the set of data identified in the work order to the second location.

37. A digital image management and order delivery system comprising:

a storage device for storing digital images;

a searching engine for developing a subset of the digital images stored in the storage device in response to inputs received from a first user, the searching engine being adapted to download low resolution copies of the subset to the first user;



a job order developer responsive to inputs received from the first user for developing a job order which includes: a) at least one high resolution copy of a digital image contained in the subset and identified by the first user, and b) a file containing information developed by the first user outside of the system; and,

a router for electronically routing the job order developed by the job order developer to a second user specified by the first user.

38. A system as defined in claim 37 wherein the digital images are input to the system by an image provider user via a communication device.

39. A system as defined in claim 38 further comprising an image handler for processing the digital images input by the image provider user, the image handler being adapted to develop low resolution images of the digital images received from the image provider user and to store both the digital images received from the image provider and the low resolution images thereof in the storage device in an addressable fashion for future searching.

40. A system as defined in claim 38 further comprising a user identifier for discriminating between users communicating with the system to control user access to the digital images stored in the storage

device, the user identifier limiting access to the digital images provided by the image provider user to at least one user identified by the image provider user.

41. A system as defined in claim 40 wherein the digital images provided by the image provider user are transparent to all users except the at least one user identified by the image provider user.

42. A system as defined in claim 37 further comprising an event tracker for monitoring and recording predefined events occurring in the system.

43. A system as defined in claim 42 wherein the predefined events comprise one of the group consisting of: storing a new digital image in the storage device; deleting a stored digital image from the storage device; connecting to the system; disconnecting from the system; conducting a search of the digital images stored in the storage device; downloading a low resolution copy of one of the digital images stored in the storage device; downloading a high resolution copy of one of the digital images stored in the storage device; and routing a work order to a user.

44. A system as defined in claim 42 further comprising means for developing an indication of a charge

to be assessed a user when at least one of the predefined events is recorded by the event tracker.

45. A system as defined in claim 44 wherein the charge developing means automatically generates invoices on a periodic basis.

46. A system as defined in claim 45 wherein the router automatically routes the invoices to the users responsible for payment.

47. A system as defined in claim 37 further comprising means for developing miniaturized depictions of the subset developed by the searching engine.

48. A system as defined in claim 47 further comprising first means for downloading the miniaturized depictions of the subset to the first user, and, second means responsive to inputs from the first user for downloading at least one low resolution copy corresponding to a selected one of the miniaturized depictions.

49. A system as defined in claim 47 wherein the router automatically electronically routes the job order to the second user.

50. A system as defined in claim 49 wherein the router automatically sends a facsimile to the second user notifying the second user of the job order being routed.

51. A system as defined in claim 49 wherein the router automatically sends an e-mail message to the second user notifying the second user of the job order being routed.

52. A system as defined in claim 37 wherein the file defines a document to be printed, the second user is a printer, and the at least one high resolution image is to be printed as part of the document.

53. A system as defined in claim 52 wherein the searching engine, the job order developer and the router are implemented by at least one programmed processing device.

54. A system as defined in claim 53 wherein the at least one programmed processing device is implemented by a file storage server and an autolog server interconnected for co-operative operation.

55. A system as defined in claim 37 further comprising a communication device for receiving and transmitting data to one or more remote users.

56. A system as defined in claim 55 wherein the communication device is implemented by an internet server, a telecommunications server, and an e-mail server.

57. A system as defined in claim 54 wherein the at least one programmed processing device is further implemented by a database server.

58. A system as defined in claim 37 wherein the storage device is implemented by an image storage device and a data storage device.

59. A system as defined in claim 58 wherein the image storage device comprises an optical disk robot and an optical data reader.

60. A system as defined in claim 58 wherein the data storage device comprises a RAID system.

61. A system as defined in claim 37 further comprising:

means for receiving digital data from a data provider user to be stored in the storage device; and,

means for compressing the digital data received by the receiving means in accordance with a parameter set by the data provider user.

62. A system as defined in claim 37 wherein the parameter defines a compression format to be employed by the compressing means.

63. A system as defined in claim 37 wherein the parameter defines a degree of compression to be employed by the compressing means.

64. A system as defined in claim 37 further comprising means for developing an indication of a charge to be assessed the data provider user for storing the digital data in the storage device.

65. A system as defined in claim 64 wherein the charge developing means develops the charge based on the amount of storage memory utilized by the digital data.

66. A digital data storage facility as defined in claim 65 wherein the charge developing means develops a further charge based on the amount of time the digital data is stored in the storage device.

67. A system as defined in claim 37 further comprising means for translating the low resolution copies of the subset into a file format defined by the first user before the searching engine downloads the low resolution copies of the subset to the first user.

68. A system as defined in claim 38 further comprising means for translating the digital images received by the system into a file format defined by the image provider user before storing the digital images in the storage device.

69. A system as defined in claim 53 wherein the at least one programmed processing device, the first user, and the second user are interconnected by a network.

70. A digital image management and order delivery system comprising:

a storage device containing digital images, the digital images including both a high resolution copy and a low resolution copy of each of the digital images; and,

a processor coupled to the storage device for controlling access to the digital images, the processor providing a searching engine for addressing and retrieving the digital images, the processor being adapted to download low resolution copies of the digital images to a first predefined user and to provide high resolution copies of the digital images to a second predefined user; the processor being further adapted to automatically electronically route documents created by the first predefined user to the second predefined user, the processor downloading high resolution copies corresponding to the low resolution copies of the digital

images identified by the first user to the second user for inclusion in the documents.

71. A method of managing digital images comprising the steps of:

storing a high resolution and a low resolution copy of each of a plurality of digital images in an electronically searchable format;

permitting a first user to locate and download a low resolution copy of at least one of the digital images;

receiving an electronic file defining a document from the first user, the document being designed to incorporate the at least one digital image and data developed outside of the system;

receiving instructions from the first user directing that the electronic file be delivered to a second user; and,

automatically electronically routing the electronic file and a high resolution copy of the at least one digital image to the second user identified by the first user.

72. A digital data storage facility for providing storage for a plurality of third party users comprising:

a storage device;

means for receiving digital data from a user in the plurality;



means for compressing the digital data received by the receiving means in accordance with a parameter set by the user; and,

means for storing the digital data compressed by the compressing means in the storage device.

73. A digital data storage facility as defined in claim 72 wherein the parameter defines a compression format to be employed by the compressing means.

74. A digital data storage facility as defined in claim 72 wherein the parameter defines a degree of compression to be employed by the compressing means.

75. A digital data storage facility as defined in claim 72 further comprising means for developing an indication of a charge to be assessed the user for storing the digital data in the storage device.

76. A digital data storage facility as defined in claim 75 wherein the charge developing means develops the charge based on the amount of storage memory utilized by the digital data.

77. A digital data storage facility as defined in claim 76 wherein the charge developing means develops a further charge based on the amount of time the digital data is stored in the storage device.

78. A digital data management and order delivery system comprising:

a storage device for storing digital data;

a searching engine for developing a subset of the digital data stored in the storage device in response to inputs received from a first user;

a job order developer for receiving a work order from the first user and for developing a job order based on the work order; and,

a router for electronically routing the job order developed by the job order developer to a second user specified by the first user.

79. A system as defined in claim 78 wherein the work order includes a file containing information developed by the first user outside of the system.

80. A system as defined in claim 79 wherein the job order includes the file.

81. A system as defined in claim 80 wherein the file comprises a page description language file.

82. A system as defined in claim 78 wherein the work order identifies digital data contained in the subset.

83. A system as defined in claim 82 wherein the job order includes the digital data identified in the work order.

84. A system as defined in claim 82 wherein the job order includes job order digital data corresponding to the digital data identified in the work order, the job order digital data having a higher bandwidth communication requirement than the digital data identified in the work order.

85. A data management system comprising:

a host server; and,

a remote server in selective communication with the host server, the remote server including means for requesting a first set of data from the host server and means responsive to the requesting means for developing a second set of data defining instructions and identifying a third set of data corresponding to the first set of data;

wherein the host server includes means for developing a fourth set of data in accordance with the instructions in the second set and means for routing the fourth set of data to a jobber.

86. A system as defined in claim 85 wherein the second set of data includes a page description language file.

87. A system as defined in claim 85 wherein the first set of data comprises a low resolution image, and the third set of data includes a high resolution image corresponding to the low resolution image.

88. A system as defined in claim 85 wherein the host server, the remote server and the job are interconnected via a network.

89. A system as defined in claim 85 wherein the third set of data is the first set of data.

90. A system as defined in claim 89 wherein the second set of data includes the first set of data.